



Technical Data Sheet

# DEUTERON MM 823

Organic Matting Agent modified with PTFE

**Deuteron**<sup>®</sup>  
ADDITIVES TO YOUR SUCCESS

## Product Characteristic

Density approx.	1.48 g/cm <sup>3</sup>
Oil absorption approx.	288 g Palatinal N/100 g (DIN ISO 787/5)
Particle size dv50 approx.	6.3 µm
Particle size dv90 approx.	17.3 µm
Appearance	fine white powder



## Product Description

Deuteron MM 823 is a compound of organic duromeric PMU powder (Polymethyl urea), with PTFE (Polytetrafluorethylene). The combination leads to a unique combination of highly durable PMU particles and the additional protective slip effect of PTFE. Designed for highest durability and quality Deuteron MM 823 can be used in all applications where abrasion resistant low gloss systems are needed.

## Applications

Deuteron MM matting agents can be used in almost all coating applications ranging from water borne and solvent borne to 100 % systems. They can be used as stand-alone additives or in combination with other materials to further improve their properties.

The use of Deuteron MM 680 especially improves the following properties:

- › Increase of scratch, scoring and polishing resistance
- › Increase of the slip and reduction of the friction values
- › Matting
- › Improved blocking resistance
- › Pleasant touch feeling
- › Low influence on viscosity even with high application quantities
- › High mechanical and chemical resistance
- › Temperature resistant up to over 200 °C, short-time up to over 300 °C
- › Insoluble in solvents commonly used in coatings
- › PMU-polymer content biodegradable

## Dosage

Typical addition range: 1 %–3 %

The required dosage level highly depends on the system (e.g. binder type, additives, solvent content) and application parameters such as layer thickness and film shrinkage. Thus, it is highly recommended to determine the needed addition level by a practical ladder study.



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## ■ Processing

The PMU chemistry in general is highly compatible in a wide range of systems. Due to that Deuteron MM matting agents can be incorporated easily by a high-speed stirrer without the need for specific wetting agents or dispersing aids. They are shear stable in high shear processes but should not be ground in a bead mill.

In water-based systems with low emulsifier and/or low coalescent levels the additional use of a suitable dispersing additive can be necessary to get a proper dispersion.

## ■ Storage Conditions

24 months at room temperature and dry conditions. Storage temperature should not exceed 35 °C.

## ■ Package Sizes

Paper bag (10 kg net)

## ■ Safety

According to Regulation (EC) No. 1272/2008 Deuteron MM 823 is not classified as a dangerous product and therefore does not need to be labelled.

For detailed information please refer to the Safety Data Sheet and Regulatory Information Sheet. The documents are also available on our website:

<https://www.deuteron.com/en/download-center/>

## ■ Deuteron: First class products for the coating industry

Deuteron GmbH successfully develops and sells innovative additives since 1977. Our product range consists of matting agents, anti-static additives, texturing additives, thickeners and UV initiators. In the course of our company history we have become an important partner of the national and international paint, lacquer and coating industry with sales agencies around the globe.

This leaflet intends to give technical advice without warranty and does not claim to be complete.



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